

# **A METHOD OF MARKING SOLID OR LIQUID SUBSTANCES WITH NUCLEIC ACID FOR ANTI-COUNTERFEITING AND AUTHENTICATION**

## **ABSTRACT OF THE DISCLOSURE**

The present invention relates to a method of marking solid or liquid substances with nucleic acid for anti-counterfeiting and authentication, specifically to a method for marking solid or liquid substances with nucleic acid dissolved in a water insoluble medium. Through the addition of an intermediate solution, the miscibility between the nucleic acid solution and the medium is increased and forms a homogenous solution. For marking solid substances or articles, the water-insoluble medium containing known nucleic acid taggants is spread on the target solid substances or articles. After drying, nucleic acids protected by the water-insoluble medium adhere on surface of the object. For marking liquid, the target liquid is mixed with the water-insoluble media containing known nucleic acid taggants. As a result, the target liquid is labeled with nucleic acid.